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UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL ADJUSTMENT ADMINISTRATION

WESTERN DIVISION

UTAH HANDBOOK

1940 Agricultural Conservation Program

PURPOSES OF THE PROGRAM

1. To protect and restore the soil resources of the Nation by assisting farmers to plant soil-building crops and carry out soil-building and range-building practices.
2. To raise farm income by bringing supplies of major crops in line with demand and by offering payments to farmers for cooperating in bringing about better conditions for agriculture.
3. To stabilize and maintain adequate food supplies for consumers.

Part I. 1940 AGRICULTURAL CONSERVATION PROGRAM

HOW THE PROGRAM WORKS

Payments may be earned by planting within farm acreage allotments and by carrying out soil-building and soil-conserving practices.

Individual farm allotments are determined by the county committee in cooperation with community committees for wheat in all counties, and potatoes and commercial vegetables in counties in which the production of these crops is important. Normal yields are also established for wheat and potatoes.

WHEAT

Wheat acreage allotments and yields are determined by the county committee in cooperation with community committees for all farms on which wheat is grown.

Payment and deduction on wheat-allotment farms.—A payment will be computed equal to 9 cents per bushel times the normal yield of wheat for the farm for each acre in its wheat acreage allotment. The approximate amount of the wheat payment is shown on WR-406B.

A deduction will be made on a wheat allotment farm of 50 cents per bushel times the normal yield for each acre planted to wheat in excess of its wheat acreage allotment.

Nonwheat-allotment farms.—A farm may be considered to be a nonwheat-allotment farm if the persons having an interest in the wheat so elect. A farm for which a wheat acreage allotment was not determined is also considered to be a nonwheat-allotment farm. No wheat payment will be made on a nonwheat-allotment farm.

On a nonwheat-allotment farm the deduction will be 50 cents per bushel times the normal yield for each acre of wheat harvested for grain or for any other purpose after reaching maturity in excess of the usual acreage of wheat determined by the county committee for the farm or 10 acres, whichever is larger.

Acreage planted to wheat means (1) any acreage of land devoted to seeded wheat, except when seeded as a part of a mixture which contains rye, oats, or barley if the mixture contains not more than 50 percent by weight of wheat; or (2) any acreage of volunteer wheat which is not disposed of by tillage prior to June 1, 1940; or (3) any acreage of land which is seeded to a mixture mentioned above on which the crops other than wheat fail to reach maturity and the wheat is harvested for grain or seed or reaches maturity.

POTATOES

In Cache, Box Elder, Weber, Davis, Utah, Piute, Millard, and Morgan Counties a potato allotment will be determined for each farm which normally grows 3 acres or more of potatoes.

A payment will be computed equal to 3 cents per bushel times the normal yield of potatoes determined by the county committee for each acre in the potato allotment. The approximate potato payment is shown on WR-406B.

If an acreage in excess of the potato acreage allotment or in excess of 3 acres (whichever is larger) is planted on a farm in the above-listed counties a deduction of 30 cents per bushel of the farm's normal yield will be made for each excess acre. If a producer plants less than 80 percent of the potato acreage allotment, the allotment and consequently the payment will be reduced.

COMMERCIAL VEGETABLES

In Box Elder, Weber, Salt Lake, Davis, and Utah Counties a commercial-vegetable acreage allotment shall be determined for each farm on which the average acreage of land normally planted to commercial vegetables is 3 acres or more.

A payment will be computed at \$1.50 for each acre in the commercial-vegetable acreage allotment determined for the farm. The approximate vegetable payment is shown on WR-406B. If a producer plants less than 80 percent of the commercial-vegetable allotment, the allotment and consequently the payment will be reduced.

A deduction of \$20 per acre will be made for each acre of land planted to commercial vegetables in excess of the larger of the commercial-vegetable acreage allotment or 3 acres.

Commercial vegetables means the acreage of annual vegetables or truck crops [including potatoes in the counties not listed as commercial-potato counties, sweetpotatoes other than for starch, tomatoes, (except canning tomatoes in Box Elder, Weber, and Davis Counties) sweet corn, cantaloupes, annual strawberries, commercial bulbs and flowers, but excluding peas for canning or freezing and sweet corn for canning] of which the major portion of the production is sold to persons not living on the farm.

TOTAL SOIL-DEPLETING ALLOTMENT

Total soil-depleting allotments shall be determined for farms for which a wheat or potato acreage allotment is determined. A deduction will be made of \$5 for each acre classified as soil-depleting in excess of the larger of (1) the total soil-depleting acreage allotment determined for the farm, plus the acres of wheat, potatoes, and commercial vegetables with respect to which deductions are made, or (2) 20 acres.

SOIL-BUILDING ALLOWANCE

The maximum amount that may be earned on a farm by carrying out soil-building practices is the sum of the following items:

1. \$2 per acre of commercial orchards (excluding nonbearing orchards and vineyards) and perennial vegetables on the farm January 1, 1940.

2. 3 cents per acre of noncrop pasture land plus 75 cents for each animal unit of grazing capacity. The amount computed under this item shall not be less than 10 cents times the number of such acres, or 640 acres, whichever is smaller.

3. 70 cents per acre of cropland in excess of the sum of (1) the wheat and potato acreage allotments, with respect to which payment is computed, and (2) the acreage of sugar beets planted for harvest in 1940 for the extraction of sugar.

For any farm where the sum of the payments computed for wheat, potatoes, commercial vegetables, and under items 1, 2, and 3 above is less than \$20, the soil-building allowance shall be increased by the amount of the difference. In addition, a payment will be computed of \$7.50 per acre for planting forest trees not to exceed a total of \$30 per farm.

SOIL-BUILDING PRACTICES

In determining the acceptability of the methods used in carrying out soil-building practices, the farmer should be guided by the specifications contained herein and any additional specifications issued by the State committee or by the county committee with the approval of the State committee, as are needed in the interest of soil conservation. This applies particularly to rates, dates, and methods of seeding, cultural practices, adaptability of soil-conserving crops, trees or shrubs, methods of weed control, etc., used in connection with soil-building practices.

The farmer must make sure that the seed used is adapted to the community, free from noxious weed and relatively free from other weed seed, and is seeded in sufficient quantity to meet the minimum seeding requirements in good viable seed. The farmer will be required to cooperate with governmental insect-control agencies in the area where the farm is located, whenever an organized insect-control campaign is operated in the area.

The approximate maximum amount that may be earned, by use of the soil-building practices in this handbook, on any farm in Utah, is the amount shown on the farm plan and estimate sheet, WR-406B. If all or part of the labor, seed, or materials is furnished by any governmental agency, no credit or only partial credit will be given for the practice. The county committee will furnish further detailed information.

The farmer should plan his operations for the year, considering the very best farm plan for that farm, and then determine whether or not his planned soil-building practices for the year will bring about the greatest possible amount of soil conservation.

Any combination of soil-building practices on the same land may be allowed by the county committee subject to the approval of the State committee.

The 1940 crop year for carrying out the soil-building practices will be from November 1, 1939, through October 31, 1940, except in Washington and Kane Counties in which the crop year will be from January 1, 1940, through December 31, 1940.

Application of Materials

Practice (1) (i)—Superphosphate.—\$1.50 for each 112 pounds of 43 percent (treble) superphosphate or its equivalent of 48 pounds of P_2O_5 in other fertilizer applied to or in connection with the seeding of legumes, perennial grasses, or permanent pasture. Rock phosphate and basic slag are forms of fertilizing material not recommended in Utah, but any other forms of phosphate carrier may be used. No credit will be given for fertilizers used in connection with soil-depleting crops.

Practice (4)—Mulching.—\$1.50 for each 2 tons, air dry weight, of straw or leguminous hay or equivalent mulching material (other than barnyard or stable manure) applied in orchards or on commercial-vegetable land. Where mulching material is applied in orchards in winter or early spring, 3 pounds of ammonium sulphate should be applied to each bearing plum, prune, apricot, or cherry tree, or 5 pounds to each bearing apple or pear tree.

Seeding Practices

Practice (6)—Seeding alfalfa.—\$1.50 for each acre of cropland or orchard land seeded to alfalfa at not less than 10 pounds of clean, adaptable seed per acre.

Practice (7)—Seeding perennial grasses.—\$3 for each acre of cropland seeded to crested wheatgrass, slender wheatgrass, western wheatgrass, or mixtures of these grasses at a rate of not less than 4 pounds of crested wheatgrass per acre and 7 pounds per acre of slender wheat and western wheatgrasses and mixtures.

A full seeding of strawberry clover will also qualify under this practice.

Practice (8)—Seeding legumes and grasses.—\$1.50 for each 2 acres of cropland or orchard land seeded to sweetclover, white clover, alsike clover, Kentucky bluegrass, smooth brome grass, perennial ryegrass, meadow fescues, tall meadow oatgrass, orchard grass, or reed canary grass, seeded alone or in approved mixtures. Timothy and redtop may be seeded in mixtures with any of the above legumes and grasses, provided the timothy and redtop seed do not make up more than 50 percent of the total weight of the mixture.

Practice (12)—Seeding timothy and redtop.—\$1.50 for each 4 acres seeded to timothy or redtop or mixtures consisting of more than 50 percent of these two grasses. Seeding must be done on a well-mulched seedbed and only on land having sufficient water.

Pasture Improvement Practices

Practice (13)—Reseeding depleted pastures.—\$1.50 for each 10 pounds of good seed of adapted grasses or legumes used in reseeding depleted pastures. The grasses and legumes approved and recommended for the State of Utah are: Mixtures of alfalfa, sweetclover, alsike clover, white clover, Kentucky bluegrass, smooth brome grass, perennial ryegrass, orchard grass, meadow fescue, tall meadow oatgrass, crested wheatgrass, and reed canary grass. Crested wheatgrass may be seeded alone under dry land conditions. The county committee will furnish formulas of seed mixtures recommended by the Utah Experiment Station.

Practice (14)—Deferred grazing.—\$1.50 for deferred grazing on two-thirds of the number of acres of land necessary to carry one animal unit for a 12-month period when the pasture is not grazed during the normal grazing season, thus allowing natural reseeding. The operator should submit to the county committee a written designation of the area to be reseeded by nongrazing and obtain their approval prior to starting the practice. The period of deferred grazing shall run from the start of forage growth to seed maturity with a minimum of 4 months deferred grazing. Where cattle or horses are grazed, the area must be fenced. Where sheep are grazed, the area to be reseeded must be fenced sufficiently to keep them out or they must be herded to prevent them from grazing on the reseeded area. Regardless of the type of livestock used, the remaining pasture land must not be injured by overgrazing. A minimum requirement for this practice will be 15 percent of the noncrop pasture land on the farm.

Practice (15)—Development of springs or seeps.—\$1.50 for each 5 cubic feet of gravel or each 3 cubic feet of rock formation excavated in the development, at the source, of springs or seeps, provided that the source is protected from trampling and at least 20 cubic feet of available water storage is provided. If the total cost of the development is at least \$20, the minimum credit shall be \$20. The maximum credit will be \$100 for this practice. Prior approval for this practice must be obtained from the county committee.

Practice (16)—Dams and reservoirs.—\$1.50 for each 10 cubic yards of material moved in making a fill or excavation, or for each 7 cubic feet of concrete or rubble masonry, used in the construction of reservoirs and dams. Prior approval of the county committee must be secured before construction is started. Approved, detailed instructions and requirements will be furnished by the county committee at the time of approval. Such reservoirs shall not be constructed for the purpose of irrigation.

Existing dams may be enlarged if the project has prior approval of the State committee based on the recommendation of the county committee. This recommendation must show that the dam is properly located, that its enlargement is necessary to make permanent water available, and must show the yardage in place as well as the yardage in the proposed enlargement.

Green Manure Crops and Cover Crops

Practice (17)—Green manure and cover crops.—(a) \$1.50 for each acre of annual legumes and biennial legumes (but not including perennial legumes or perennial grasses) commonly used as green manure crops, of which a good stand and a good growth are turned under as green manure on irrigated land, or in orchards, or on commercial-vegetable or potato land.

\$1.50 for each acre of small grains (except wheat) or mixtures of small grains (except wheat) and the above-mentioned legumes, of which a good stand and a good growth are turned under as green manure in orchards or on commercial-vegetable or potato land.

\$1.50 for each acre for leaving on the land in orchards or on commercial-vegetable, or potato land a good stand and a growth of any of the above crops as a cover crop.

(b) \$1.50 for each 2 acres of small grains (except wheat) when used as green manure or cover crops on irrigated land other than in orchards or commercial-vegetable or potato land.

Cover crops must not be pastured or used in any other manner. Crops used for green manure or cover crops must not be utilized for credit for any other practice in 1940 and must not include any crop from which seed is harvested by mechanical means.

Green manure crops must be inspected by a committeeman or farm supervisor prior to, or at the time of, turning under.

Erosion-Control Practices

Practice (20)—Terraces.—\$1.50 for each 200 linear feet of standard terraces constructed. Terraces should be from 15 to 20 feet wide, the steeper the slope the narrower the terraces, and they should be 18 inches high when settled and not more than 1500 feet in length, with sufficient grade to carry to the outlet. The vertical drop between terraces should be 3 feet on 4 percent slopes, 3½ feet on 6 percent slopes, 4 feet on 8 percent slopes, and 4½ feet on 10 percent

slopes. Terraces must be constructed so as to effectively control soil erosion or conserve moisture in the area involved. The outlets must be sufficiently protected to prevent erosion. The work should preferably be done under a competent engineer. Terraces on irrigated land must have the prior approval of the county committee and must be carried out in accordance with good irrigation practices for the community and on a grade of not more than $1\frac{1}{2}$ percent.

Practice (21)—Check dams, weirs, and drops.—\$1.50 for each 7 cubic feet of concrete or rubble masonry used in the construction of check dams or drops and measuring weirs for the control of erosion, leaching, and seepage of irrigated cropland and orchard land. Prior approval of the county committee must be secured. At the time of approval, detailed instructions and requirements will be furnished.

Practice (22)—Water spreading.—\$1.50 for each 300 linear feet of ditching constructed for the diversion and spreading of flood water on pasture land or hay land. Ditches of less than 300 feet in length will not qualify. The ditches must be of such design as to produce nonerosive velocities of the water, the grade not exceeding 5 inches per 100 feet of length, with a cross-section measurement of not less than 4 square feet. The ditch must have ample capacity to carry the diverted water with an adequate outlet at the discharge end. If openings are made along the ditch, these must be protected by either sod, riprap, or woven wire spreaders to prevent erosion.

Practice (23)—Riprapping live streams.—\$1.50 for each cubic yard of rock riprap constructed along active streams for the control of erosion of farm land. Prior approval of the county committee must be secured before construction is started. Approved instructions will be furnished to each cooperator whose project is approved.

Practice (26)—Contour listing noncropland.—\$1.50 for each 4 acres of non-cropland contour listed or furrowed. The contour furrows must be not more than 20 feet apart and not less than 4 inches deep or less than 8 inches wide and must be dammed at intervals of not more than 50 feet. If the furrows are $8\frac{1}{4}$ feet or less apart the actual acres of land furrowed will count under this practice. If the furrows are over $8\frac{1}{4}$ feet apart, the acreage of the practice will be computed on the basis of the acreage occupied by the furrows, each furrow being considered to occupy a strip $8\frac{1}{4}$ feet wide. Prior approval of the county committee must be obtained. The committee will furnish the operator with approved, detailed instructions for carrying out the practice.

Practice (31)—Protected summer fallow.—\$1.50 for each 4 acres of summer fallow protected from wind and water erosion by contour listing, pit cultivation, or by incorporating small grain stubble and straw into the surface soil. This practice is applicable to cropland.

- (a) In contour listing the furrows must not be more than 4 feet apart, at least 4 inches in depth below the surface of the soil, and shall not vary from the true contour by more than 2 percent.
- (b) In pit cultivation the pits shall cover at least 25 percent of the surface, shall be at least 4 inches in depth, and the dams shall not be more than 10 feet apart.
- (c) Tillage implements used to incorporate stubble or straw into the surface soil shall leave a rough, cloddy surface and shall leave the stubble and straw on or near the surface and none of the stubble or straw should be burned.

No credit will be given for this practice when carried out on light, sandy soil or on soils in any area where destruction of vegetative cover results in land becoming subject to serious wind erosion.

Practice (34)—Pit cultivation.—\$1.50 for each 8 acres of pit cultivation, pits to be at least 4 inches in depth below surface of soil and constructed so that the pits cover at least 25 percent of the ground surface and distance between dams shall not be more than 10 feet. No credit will be given for this practice when carried out on protected summer-fallowed acreage or as a part of a seeding operation.

Practice (35)—Small grains on contour.—\$1.50 for each 10 acres of cropland seeded to small grains on the contour. Drill rows must follow approximately the contour. Land eligible for this practice must have a slope of 2 percent or greater in order to qualify. This practice must be carried out according to specifications on 95 percent of the field if the field is to qualify.

Forestry Practices

Practice (38)—Protecting trees.—\$3 for each acre of forest trees that were planted between July 1, 1936, and July 1, 1940, which are cultivated, protected, and maintained by replanting if necessary to keep a stand of not less than 200 living trees per acre. Livestock must be kept out of the area and there must be sufficient cultivation to keep down weed growth. Trees should be irrigated when in need of water if possible. Measurements on single-row plantings will be one-half rod on each side of the row. In block plantings the measurements will be taken one-half rod outside of the last row of plantings.

Practice (40)—Planting trees.—\$7.50 per acre for planting forest trees including shrubs beneficial to wildlife, provided the plantings are protected and cultivated in accordance with good practice. Prior approval of the county committee is required and detailed, approved instructions as to time of planting, methods of planting and varieties that may be used will be furnished to each individual whose project meets with their approval.

Other Practices

Practice (43)—Controlling noxious weeds.—\$7.50 for each acre on which seriously infested plots of perennial noxious weeds in organized weed-control districts are controlled by tillage methods or by the use of chemicals. Credit will be given for control of the following weeds: Canada thistle, bindweed or morning-glory, white top, leafy spurge, whorled milkweed, perennial ragweed, and Russian knapweed. Prior approval of the area must be obtained from the county committee. Approved, detailed instructions for carrying out weed control will be given to each operator.

Practice (46)—Renovating perennial grasses or perennial legumes and grasses.—\$1.50 for each 2 acres of 1-year-old perennial legumes or perennial grasses or mixtures of perennial grasses and legumes renovated on cropland by cultivation to a depth of 2 inches and reseeded at the rate of not less than 4 pounds per acre. Where renovation is followed by irrigation, the water must not be put on until after all weeds have been exposed long enough to die.

Practice (47)—Subsoiling.—\$1.50 for each 4 acres of cropland or land in orchards that is subsoiled to a depth of not less than 10 inches. The acreage will be computed on the basis of the area so handled, each furrow being considered to occupy an area not in excess of one-half rod in width.

SOIL-DEPLETING ACREAGE

Any acreage of land devoted during the 1940 crop year to one or more of the following crops or uses will be considered as soil-depleting acreage:

Corn planted for any purpose except sweet corn or popcorn grown in a home garden for use on the farm;

Grain sorghums, sugar beets, mangels, or cowbeets planted for any purpose;

Potatoes or annual truck and vegetable crops planted for any purpose except when grown in a home garden for use on the farm;

Field beans planted for any purpose or peas planted for canning, freezing, or dried peas, except when grown in a home garden for use on the farm or when incorporated into the soil as green manure;

Flax planted for any purpose;

Wheat planted or regarded as planted for any purpose on a wheat-allotment farm;

Wheat on a nonwheat-allotment farm harvested for any purpose after reaching maturity;

Oats, barley, rye, emmer, speltz, or mixtures of these crops harvested for grain;

Wheat on a nonwheat-allotment farm, oats, barley, rye, emmer, speltz, or mixtures of these crops, including designated mixtures containing wheat on any farm, harvested for hay, except when such crops are used as nurse crops for legumes or perennial grasses which are seeded in a workmanlike manner and the nurse crop is cut green for hay or except when such crops are grown in a mixture containing at least 25 percent by weight of winter legumes;

Buckwheat, Sudan grass, or millet harvested for grain or seed;

Sweet sorghums harvested for grain, seed, or sirup;

Land summer fallowed except when such land is seeded in 1940 to crested, slender, or western wheatgrass, smooth (common) brome, tall oatgrass, mountain brome, bulbous bluegrass, or alfalfa, or is irrigated land which is cultivated periodically to control noxious weeds.

PAYMENT PROVISIONS

Division of special crop payments.—In general, the crop-allotment payments and deductions will be divided between landlords and tenants as the crop is divided. In cases where two or more separately owned tracts of land comprise a farm the share of each person in the payment or deduction will be that indicated on ACP-95 if all interested persons agree.

Division of soil-building payments.—The payments earned in connection with the soil-building practices will be paid to the landlord or tenant who carried out the soil-building practices.

Deductions from other farms.—If a person complies on one farm and has an interest in other farms which are not in compliance to the extent that deductions exceed the payments, the payments due him on the farm in compliance will be reduced by his share of the deductions carried over from the other farm.

Increase in small payments.—If the total payment computed for any person is less than \$200 the payment will be increased by an amount fixed by the law. Information as to the exact amount of the increase can be obtained from the county committee.

Payments limited to \$10,000.—Combined range and agricultural conservation payments to any individual, partnership, or estate are limited by the law to \$10,000 in a State; a corporation or association is, by the law, limited to \$10,000 in the United States.

Deductions for association expenses.—The estimated administrative expenses of the county agricultural conservation association shall be deducted pro rata from the payments computed for all the farms in the county.

Defeating purposes of the program.—Congress has authorized payments only to persons whose cooperation results in net contributions to the program. Accordingly, payment will be withheld from any person who adopts any practice which tends to defeat or offset the purposes of the program.

Idle farms.—The only payments which will be made with respect to farms which are not operated in 1940 are payments for carrying out soil-building practices.

Payments made or computed without regard to claims.—Any payment or share of payment will be made without regard to question of title under State law and without regard to any claim or lien against any crop, or proceeds thereof, in favor of the owner or any other creditor, except as stated in the paragraph on assignments, and indebtedness to the United States which is subject to set-off.

Availability of funds.—All payments provided for in this handbook are subject to the limits determined by appropriations which Congress may provide. As an adjustment for participation the rates of payment and deduction with respect to any commodity or item of payment may be increased or decreased by as much as 10 percent.

APPLICATION PROVISIONS

Eligibility for payment.—An application for payment may be made by any person who is owner-operator or for whom a share in the payment with respect to a farm may be computed and who, at the time of harvest, is entitled to share in any of the crops grown on the farm under a lease or operating agreement, or who is owner or operator of the farm and participates in 1940 in carrying out approved soil-building practices on the farm.

Time of filing application.—Payments will be made only upon application submitted through the county office on or before March 31, 1941, and only to those persons who furnish required information and file prescribed forms within the respective time limits therefor.

Other farms in the county.—A person must make application for payment with respect to all farms in the county which he operates or rents to other persons.

MISCELLANEOUS PROVISIONS

Assignments.—Any person who may be entitled to a payment in connection with the 1940 program may assign his interest in such payment as security for cash loaned or advances made for the purpose of financing the making of a crop in 1940, or for money or materials advanced or labor performed in carrying out range-building practices. No assignment will be recognized unless the assignment is made on ACP-69 and in accordance with instructions contained in ACP-70.

Appeals.—Any person has 15 days following his notice of any action of the county committee to file a written appeal asking for reconsideration. Any person having appealed to the county committee who is still dissatisfied may, within 15 days following his notice of the reconsideration, appeal to the State committee, whose action is reviewable by the Regional Director.

Applicability.—The provisions of the 1940 program are not applicable to public domain, including land owned by the United States and administered under the Taylor Grazing Act or by the Forest Service of the United States Department of Agriculture and other land in which the beneficial ownership is in the United States.

ADDITIONAL INFORMATION

Complete information may be obtained from the county office of the agricultural conservation association regarding allotments, payments, appeals, detailed specifications for soil-building practices, and other details of the program.

Part II. 1940 RANGE CONSERVATION PROGRAM

HOW THE PROGRAM WORKS

Payments may be earned by carrying out range-building practices, listed below, from November 1, 1939, through October 31, 1940 (except in Washington and Kane Counties, where the applicable period will be January 1, 1940, through December 31, 1940), which are approved by the county committee for the ranching unit prior to their institution. Detailed specifications will be given to the operator for those practices which he selects for which further detailed specifications are necessary. The amount of payment which may be earned cannot exceed the range-building allowance.

RANGE-BUILDING PRACTICES

Reseeding Range Land

Practice (a)—Natural reseeding by deferred grazing.—75 percent of the range-building allowance, excluding that part which is computed for mountain meadow land, may be earned by withholding 25 percent of the range land from grazing from the start of forage growth to seed maturity (such period to be of not less than 120 consecutive days between such dates as are determined by the State committee and announced by the county committees for their respective counties not later than 15 days prior to the beginning of such period) and by performing supplemental practices prescribed by the county committee for which payment will not otherwise be made. If less than 25 percent of the range land in the ranching unit is deferred, a proportionate payment may be earned. In any event, the payment for deferred grazing shall not exceed the value of supplemental practices performed which are designated by the county committee in accordance with instructions. Before giving prior approval, the county committee must determine that the deferred area is adequately protected against the entry of livestock by a well-maintained fence or by natural barriers, or will be protected by herding. The remaining range land on the ranching unit must not be pastured to such an extent as will decrease the stand of grass or injure the forage, tree growth, or watershed. The practice of deferred grazing shall not be applicable on a part of a ranching unit which normally is not used for grazing. The operator must file Form WR-415 with the county committee designating the area to be deferred previous to the initiation of the practice. The deferred acreage may be used for grazing at the close of the specified period, but hay shall not be cut or seed harvested therefrom in 1940.

Practice (b)—Artificial reseeding.—20 cents per pound of seed sown, but not in excess of \$2 per acre. For reseeding depleted range land including mountain meadowland, with good seed of adapted varieties of range grasses, legumes, or forage shrubs as are recommended for the locality by the Utah Experiment Station or Extension Service and approved by the State committee.

Good seed of high germination and purity, free from weed seeds, shall be used. New seeding must be adequately protected. Detailed information regarding dates, rates, approved varieties and approved methods of protection shall be obtained from the county committee at the time of approval of the practice.

The operator must present conclusive evidence of the amount, kind and quality of grass, legume or shrub seed used in performance under this practice.

EROSION AND RUN-OFF CONTROL

All soil-erosion and water-conservation measures developed for payment shall be solely for the purpose of conserving moisture and retarding soil erosion on range land in order to facilitate the renovation and maintenance of adequate vegetative cover. The use of mechanical water-conservation measures shall be limited to soil types that are porous enough to satisfactorily utilize the additional moisture from the application of these measures, and to the flatter slopes or locations where the diversion can be attained without undue expense. All erosion control measures shall be staked out by a competent person prior to institution.

Practice (d)—Contour listing, furrowing, or subsoiling.— $2\frac{1}{2}$ cents per 100 linear feet. For listing, furrowing, or subsoiling range land, including mountain meadowland, on the contour. Written prior approval must be secured from the county committee, at which time detailed specifications will be furnished to the operator.

Payment shall not be approved on an acreage on which a similar practice was paid for under a previous program.

Practice (f) (1)—Spreader dams.—15 cents per cubic yard of material moved. Specifications for dams in excess of 4 feet in height shall be the same as for Practice (g), Earthen tanks and reservoirs, in respect to top width, freeboard, and side slopes and will be furnished by the county committee.

Small spreader dams or dikes may be used either individually or in combination with larger spreader dams. Spreader dams will not be necessary on small water sheds where dikes can divert the water. Small dams or dikes shall have minimum side slopes of 2 to 1. The crown shall not be less than 1 foot wide. Sufficient openings should be made through the dikes according to topographic features to allow for uniform spreading of diverted water. The opening shall be protected by masonry, rock riprap, or sodding.

Under no circumstances shall payment be made for performance of this practice unless the diverted water is evenly spread over the area affected and its return to the flood channel is retarded sufficiently to prevent further erosion.

Practice (f) (2)—Spreader terraces.—50 cents per 100 linear feet.

Spreader terraces or diversion ditches for any purpose other than spreading of flood water will not qualify for payment. The ditch should be designed for nonerosive velocities. Ditches shall have a cross-section measurement of not less than 5 square feet at the point of diversion, and 2 square feet at the discharge end. The ditch shall have ample capacity to carry the diverted water and shall have an adequate outlet at the discharge end. Openings made along the length of the ditch, where the density of natural sod is not sufficient to spread water without erosion, shall be protected.

STOCK WATER DEVELOPMENT

Any practice under water development performed for payment shall supply ample water for the number of livestock using the adjoining range during its period of grazing and shall be solely to bring about such a distribution of livestock on the range as will conserve and restore the vegetative cover thereof, but shall not be used to impound water for irrigating purposes.

Existing dams may be enlarged if the project has prior approval of the State committee based on the recommendation of the county committee. This recommendation must show that the dam is properly located, that its enlargement is necessary to make permanent water available, and must show the yardage in place as well as the approximate yardage in the proposed enlargement. All constructions shall be of a permanent nature and in accordance with approved specifications.

Any development of stockwater on a ranching unit within a reasonable distance of any other watering place, which already provides adequate water to livestock using the adjoining range, shall not be approved for payment.

Practice (g)—Earthen tanks and reservoirs.—15 cents per cubic yard of material moved not in excess of 5,000 cubic yards, and 10 cents per cubic yard of material moved in excess of 5,000 yards in a single development.

For constructing reservoirs or earthen tanks with spillways adequate to prevent dams from washing out, for the purpose of providing water for range livestock.

This practice shall not be approved on permanently running streams in light sandy soil or in porous formations incapable of impounding water. Payment will not be made for building dams with a fill more than 13 feet in height unless the construction and specifications therefor are approved in writing by the State committee prior to institution.

Spillways, if not sodded or heavily grassed, shall be adequately protected in accordance with specifications issued by the State committee. The cross-sectional capacity of the spillway for each dam with drainage areas in excess of 400 acres shall not be less than 45 square feet; for drainages of less than 400 acres, the spillway cross section shall not be less than 30 square feet. The county committee may specify a larger spillway wherever necessary taking into consideration the soil type, slope and size of drainage area above the structure.

The bottom of the reservoir shall be not less than 7 feet below the floor of the spillway. The minimum freeboard (distance measured vertically between the top of the dam and the bottom of the spillway) shall be 3 feet. For dams with a maximum height greater than 12 feet, the freeboard shall be at least equal to 25 percent of the height, except that a freeboard in excess of 7 feet shall not be required or paid for in any dam.

Dam dimensions shall meet the following specifications: The top width shall be a minimum of 6 feet. Slopes shall not be steeper than 3 to 1 on the upstream face and 2 to 1 on the downstream face. Sites for all dams shall be surveyed by a competent person who will stake off and prepare a design of the proposed dam. Prior approval by the county committee shall be based upon such information and shall be made in writing and at the time of approval, detailed instructions shall be furnished.

A diversion channel from another drainage shall qualify for payment under this practice, provided such channel is constructed on a nonerosive grade and there is no possibility of its use for irrigation. Payment shall be made for excavated cross section not in excess of 3 square feet.

Where the construction of a dam is not necessary to impound water and the topography of the land makes it possible to concentrate water in a pit or earthen tank for livestock, and specifications for a dam and spillway are not applicable, payment will be made for excavating a pit or earthen tank in accordance with approved specifications.

Practice (h)—Concrete or rubble masonry dams.—\$6 per cubic yard of concrete or rubble masonry.

For constructing concrete or rubble masonry dams in rough or broken areas (where earthen dams or reservoirs are impracticable and where there is no possibility of using the masonry dam for irrigation), for the purpose of providing water for range livestock.

The dams shall be located on a firm foundation that will insure stable support for the structures under all conditions. The locations shall be such as to take advantage of minimum size requirements for structures and at the same time give a minimum reservoir depth of 5 feet. All proposed dams must be constructed at sites and in accordance with specifications approved in writing by the State committee prior to institution.

Practice (i) (1)—Wells.—\$2 per linear foot. For drilling or digging wells with casing not less than 4 inches in diameter, for the purpose of providing water for range livestock, provided a windmill or power pump is installed and the water is conveyed to a tank or storage reservoir. Payment will not be made for a well developed at any ranch headquarters.

A dry hole shall not qualify. A mechanical lifting device other than a hand pump shall be installed and in operation at the time of inspection. An existing well may be deepened to provide an additional supply of water adequate for the

number of livestock on the adjacent range, but **under no circumstances** shall such performance be approved before measurements, showing the depth of the existing well, have been made and recorded with the county committee.

No payment will be made for a tank or storage reservoir constructed in connection with this practice. An artesian well shall not qualify under this practice.

Practice (i) (2)—Wells.—\$1 per linear foot. For drilling wells with casing less than 4 inches in diameter, for the purpose of providing water for range livestock, provided a windmill or power pump is installed and the water is conveyed to a tank or storage reservoir. An artesian well with casing less than 4 inches in diameter will qualify for payment, provided adequate stock water is made available during the grazing season and the water is conveyed to a tank or trough. Payment will not be made for a well developed at any ranch headquarters.

The same specifications as for a well with 4-inch casing will apply with the exception that no payment will be made for a well other than an artesian well under this practice if casing less than 2 inches is installed. An artesian well equipped with a cut-off device, when constructed according to specifications, will be approved, but a mechanical lifting device will not be required. No payment will be made for a tank or storage reservoir constructed in connection with this practice.

Practice (j) (1)—Development of natural watering places in soil.—30 cents per cubic foot of excavation in soil or gravel, provided the minimum payment will be \$20 and the maximum payment \$100 for any single development. This practice will not be approved for payment unless the total cost of the development amounts to at least \$20. Springs or seeps shall be developed for the purpose of providing water for range livestock. The source shall be protected from trampling, and at least 20 cubic feet of available water storage must be provided.

Performance shall be in accordance with detailed specifications issued by the State committee.

Practice (j) (2)—Development of natural watering places in rock.—50 cents per cubic foot of excavation in rock, provided the minimum payment will be \$20 and the maximum payment \$100 for any single development. This practice will not be approved for payment unless the total cost of the development amounts to at least \$20.

Specifications for this practice are the same as for Practice (j) (1).

Elimination of Sagebrush

Practice (r)—Elimination of sagebrush.—50 cents per acre for the elimination of a heavy infestation of sagebrush by railing or grubbing.

If the county committee determines the elimination of destructive plants under this practice will reduce the vegetative cover to such an extent as to encourage increased soil erosion, the use of Practice (b), Artificial reseeding, shall also be required.

This practice shall only be performed where the degree of infestation shades the ground to such an extent that it crowds out and weakens natural grass cover; but the practice is not applicable where the remaining vegetative cover will not be sufficient to prevent loose soil from blowing after removal of destructive plants if the establishment of a stand of grass is doubtful under Practice (b).

RANGE-BUILDING ALLOWANCE

The range-building allowance shall be 3 cents per acre of range land in the ranching unit plus 75 cents times the grazing capacity of the range land. However, the grazing capacity item shall not be calculated on more than one animal unit for each 10 acres of range land in the ranching unit, and the acreage item shall not be calculated on more than 60 acres for each animal unit of grazing capacity established for the ranching unit. The amount computed under the above items shall not be less than 10 cents times the number of such acres or 640 acres, whichever is smaller. In addition, in all Utah counties, the range-building allowance shall include 35 cents for each acre classified as mountain meadowland in the ranching unit.

CONDITIONS OF PAYMENT

Payments under the 1940 Range Conservation Program shall be made only on those ranches with respect to which the county committee certifies that good range management practices have been carried out and only for such practices as are needed on the ranch to promote conservation and good range management.

Payment for range-building practices shall not exceed the range-building allowance computed for the ranch and shall be made for any practice only when performed in accordance with approved specifications.

No payment will be made where one-half or more of the total cost of a practice is contributed by a State or Federal agency. If less than one-half of such cost is contributed by a State or Federal agency, payment at one-half the approved rate may be made.

All or any part of the payment for performance of range-building practices may be withheld if the applicant has employed any scheme or device that will deprive another person of a share of the payment to which he would have been entitled had the 1939 leasing arrangement been in effect, or if any practice has been adopted which defeats the purpose of this or any previous range programs, or if the forage, tree growth or watershed has been injured by overgrazing in 1940 on any range land under the control of the operator.

Application for payment.—Application for range-building payments may be made only by operators of active ranches.

GENERAL PROVISIONS

Range program provisions similar to those for agricultural conservation program.—Provisions of the range program with respect to claims, assignments, time of filing applications, increase in small payments, \$10,000 limitation, deductions for administrative expenses, appeals, availability of funds, and applicability are similar to such provisions in Part I of this handbook.

Establishment of grazing capacities.—The grazing capacity of each ranch for which form WR-415 is executed, which form must be filed in the county office before May 1, 1940, will be determined by a competent range examiner.

ADDITIONAL INFORMATION

Complete information may be obtained from the county office of the county agricultural conservation association regarding payments, appeals, range-building practices, and other details of the program.

N. E. DODD,
Director, Western Division.



